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10/748,655	12/31/2003	Craig Nevill-Manning	0026-0049	2801
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HARRITY SNYDER, LLP			ALI, FARHAD	
11350 Random Hills Road				
SUITE 600				
FAIRFAX, VA 22030				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/748,655

Applicant(s)

NEVILL-MANNING ET AL.

Examiner

Farhad Ali

Art Unit

2146

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 recites the limitation "reduced number of parameters" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Goodman (US 5,999,929 A).

Goodman teaches:

Claim 1

A method comprising:

receiving a first uniform resource locator (URL) including one or more parameters (Column 4 Lines 21-22, "Each BRWSR.sub.-- REQ browser request will include a URL");

retrieving content corresponding to the first URL (Column 4 Lines 29-32, "the front end 12 uses the URL to, in turn, initiate a retrieval operation, also over the Internet, with the particular server computer (not shown) that maintains the Web page identified by the URL);

retrieving content corresponding to a plurality of URLs having different parameter combinations of the one or more parameters; identifying a parameter combination from the plurality of URLs that corresponds to content that is approximately the same as the content corresponding to the first URL (Column 4 Lines 41-50, "For each URL identified by the front end 12 in the Web page, the front end 12 will pass the URL to the back end 13. The back end 13, in turn, will indicate whether the respective URL is associated with a class and, if so, the particular class. More particularly, the back end 13 will return to the front end 12 a URL identifying a Web page, in particular the URL for a Web page maintained by the back end 13 that contains the list of links that are in the class which also contains the URL that the front end 12 provided to the back end 13"); and

generating one or more URL rewrite rules based on the identified parameter combination (Column 5 Lines 17-21, "To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms").

Claim 2

The method of claim 1, wherein the different parameter combinations include the first URL with no parameters, the first URL with each of the one or more parameters individually, and the first URL with combinations of the one or more parameters (Column 7 Lines 24-28, "In generating the URL re-write rules, the Web page analyzer 15 generally processes the URL from the outward most portions of the respective World Wide Web addresses, eliminating portions of the respective series, as defined by the separators, to determine candidate URLs", and also see Column 7 Lines 28-50).

Claim 3

The method of claim 1, further comprising:

performing the receiving a first URL (Column 4 Lines 21-22, "Each BRWSR.sub.-REQ browser request will include a URL"), retrieving content corresponding to the first URL (Column 4 Lines 29-32, "the front end 12 uses the URL to, in turn, initiate a retrieval operation, also over the Internet, with the particular server computer (not shown) that maintains the Web page identified by the URL), retrieving content corresponding to the plurality of URLs, and identifying the parameter combination, for multiple different first URLs that each include the same parameters (Column 4 Lines 41-50, "For each URL identified by the front end 12 in the Web page, the front end 12 will pass the URL to the back end 13. The back end 13, in turn, will indicate whether the respective URL is associated with a class and, if so, the particular class. More particularly, the back end 13 will return to the front end 12 a URL identifying a Web

page, in particular the URL for a Web page maintained by the back end 13 that contains the list of links that are in the class which also contains the URL that the front end 12 provided to the back end 13"); and

generating the one or more URL rewrite rules for the identified parameter combinations (Column 5 Lines 17-21, "To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms").

Claim 4

The method of claim 3, wherein the rewrite rules specify that parameters that do not occur in a threshold number of the identified parameter combinations are to be removed (Column 8 Lines 30-33, "After generating the score, the Web page analyzer 15 will store the candidate re-write rule in the URL re-write rulebase 16B if the score is below a predetermined threshold value").

Claim 5

The method of claim 1, wherein each rewrite rule applies to a particular web site or web host (Column 5 Lines 17-21, "To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms").

Claim 6

The method of claim 1, wherein the reduced number of parameters includes a minimum number of parameters (Column 7 Lines 40-50, examples show removing portions from the “beginning” and “end” of the World Wide Web address without ever actually removing the first unique part of the URL).

Claim 7

A method for converting a uniform resource locator (URL) into a canonical form of the URL, the method comprising:

receiving a URL that refers to content and that contains a parameter set including at least one parameter (Column 4 Lines 21-22, “Each BRWSR.sub.-- REQ browser request will include a URL”);

applying a predetermined rewrite rule to the URL that removes the at least one parameter from the URL when the at least one parameter does not affect the content referred to by the URL; and outputting the rewritten URL as the canonical form of the URL (Column 5 Lines 17-21, “To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms”).

Claim 8

The method of claim 7, wherein the predetermined rewrite rule is determined by:

receiving a plurality of URLs that contain the parameter set; and identifying parameters in the parameter set that do not contribute to content (Column 7 Lines 50-67 and Column 8 Lines 1-9, addresses generating re-write rules).

Claim 9

The method of claim 8, wherein the identifying parameters in the parameter set that do contribute to content includes retrieving content corresponding to a sampled URL containing combinations of parameters in the parameter set and identifying a combination of parameters for which the retrieved content is approximately the same as the content corresponding to the parameter set and that contains a reduced number of parameters (Column 8 Lines 1-9, "If the Web page analyzer 15 determines in step 2b that the URLs in the entry are not identical to each other, it (that is, the Web page analyzer 15) find the shortest substitution rule that textually rewrites the longer URL into the shorter URL. For example, the shortest rule to change http://www.netscape.com/index.html" to "HTTP://netscape.com/index.html" is to replace "www." with "" (that is, delete "www."). This rule is now a "candidate" rewrite rule").

Claim 10

The method of claim 9, wherein the combinations of parameters include the sampled URL with no parameters, the sampled URL with individual

parameters, and the sampled URL with combinations of the at least one parameter (Column 7 Lines 24-28, "In generating the URL re-write rules, the Web page analyzer 15 generally processes the URL from the outward most portions of the respective World Wide Web addresses, eliminating portions of the respective series, as defined by the separators, to determine candidate URLs", and also see Column 7 Lines 28-50).

Claim 11

The method of claim 7, wherein the rewrite rule applies to a particular web site or web host (Column 5 Lines 17-21, "To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms").

Claim 12

One or more devices comprising:

at least one fetch bot configured to download content on a network from locations specified by uniform resource locators (URLs) (Column 4 Lines 29-32, "the front end 12 uses the URL to, in turn, initiate a retrieval operation, also over the Internet, with the particular server computer (not shown) that maintains the Web page identified by the URL);

a content manager configured to extract URLs from the downloaded content (Column 4 Lines 33-36, "After the front end 12 receives the Web page it will scan through the Web page to locate links in the page");

a rewrite component configured to receive a URL that refers to content and that contains a parameter set including at least one parameter (Column 4 Lines 21-22, "Each BRWSR.sub.-- REQ browser request will include a URL"),

apply a predetermined rewrite rule to the URL that removes the at least one parameter from the URL when the at least one parameter does not affect the content referred to by the URL, output the rewritten URL as the canonical form of the URL (Column 5 Lines 17-21, "To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms"); and a URL manager configured to store the canonical form of the URL (Column 5 Lines 30-33, "The Web page analyzer 15 stores information regarding the identifications for the various classes and the Web page assignment information in the link class database 17").

Claim 13

The one or more devices of claim 12, wherein the predetermined rewrite rule is determined by:

receiving a plurality of URLs that contain the parameter set; and identifying parameters in the parameter set that do not contribute to content (Column 7 Lines 50-67 and Column 8 Lines 1-9, addresses generating re-write rules).

Claim 14

The one or more devices of claim 13, wherein the identifying parameters in the parameter set that do contribute to content includes retrieving content corresponding to a sampled URL containing combinations of parameters in the parameter set and identifying a combination of parameters for which the retrieved content is approximately the same as the content corresponding to the parameter set and that contains a minimum number of parameters (Column 8 Lines 1-9, "If the Web page analyzer 15 determines in step 2b that the URLs in the entry are not identical to each other, it (that is, the Web page analyzer 15) find the shortest substitution rule that textually rewrites the longer URL into the shorter URL. For example, the shortest rule to change `http://www.netscape.com/index.html`" to `"HTTP://netscape.com/index.html"` is to replace `"www."` with `""` (that is, delete `"www."`). This rule is now a "candidate" rewrite rule").

Claim 15

The one or more devices of claim 14, wherein the combinations of parameters include the sampled URL with no parameters, the sampled URL with individual parameters, and the sampled URL with combinations of the at least one parameter (Column 7 Lines 24-28, "In generating the URL re-write rules, the Web

page analyzer 15 generally processes the URL from the outward most portions of the respective World Wide Web addresses, eliminating portions of the respective series, as defined by the separators, to determine candidate URLs", and also see Column 7 Lines 28-50).

Claim 16

The one or more devices of claim 12, wherein each rewrite rule applies to a particular web site or web host (Column 5 Lines 17-21, "To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms").

Claim 17

A system comprising:

means for receiving a first uniform resource locator (URL) including one or more parameters (Column 4 Lines 21-22, "Each BRWSR.sub.-- REQ browser request will include a URL");

means for retrieving content corresponding to the first URL (Column 4 Lines 29-32, "the front end 12 uses the URL to, in turn, initiate a retrieval operation, also over the Internet, with the particular server computer (not shown) that maintains the Web page identified by the URL);

means for retrieving content corresponding to a plurality of URLs having different parameter combinations of the one or more parameters; means for identifying the parameter combination from the plurality of URLs that corresponds to content that is approximately the same as the content corresponding to the first URL and that contains a minimum number of parameters (Column 4 Lines 41-50, "For each URL identified by the front end 12 in the Web page, the front end 12 will pass the URL to the back end 13. The back end 13, in turn, will indicate whether the respective URL is associated with a class and, if so, the particular class. More particularly, the back end 13 will return to the front end 12 a URL identifying a Web page, in particular the URL for a Web page maintained by the back end 13 that contains the list of links that are in the class which also contains the URL that the front end 12 provided to the back end 13"); and

means for generating one or more URL rewrite rules based on the identified parameter combination (Column 5 Lines 17-21, "To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL rewrite rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms").

Claim 18

A computer-readable medium including programming instructions executed by a processor, the programming instructions comprising:

instructions for receiving a first uniform resource locator (URL) including one or more parameters (Column 4 Lines 21-22, "Each BRWSR.sub.-- REQ browser request will include a URL");

instructions for retrieving content corresponding to the first URL (Column 4 Lines 29-32, "the front end 12 uses the URL to, in turn, initiate a retrieval operation, also over the Internet, with the particular server computer (not shown) that maintains the Web page identified by the URL);

instructions for retrieving content corresponding to a plurality of URLs having different parameter combinations of the one or more parameters; instructions for identifying the parameter combination from the plurality of URLs that corresponds to content that is approximately the same as the content corresponding to the first URL and that contains a minimum number of parameters (Column 4 Lines 41-50, "For each URL identified by the front end 12 in the Web page, the front end 12 will pass the URL to the back end 13. The back end 13, in turn, will indicate whether the respective URL is associated with a class and, if so, the particular class. More particularly, the back end 13 will return to the front end 12 a URL identifying a Web page, in particular the URL for a Web page maintained by the back end 13 that contains the list of links that are in the class which also contains the URL that the front end 12 provided to the back end 13");
and

instructions for generating one or more URL rewrite rules based on the identified parameter combination (Column 5 Lines 17-21, "To assist in the duplicate

Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms”).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farhad Ali whose telephone number is (571) 270-1920. The examiner can normally be reached on Monday thru Friday, 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey C. Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

F.A.

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A handwritten signature in black ink, appearing to read 'Jeffrey PWU', written in a cursive style.

JEFFREY PWU
SUPERVISORY PATENT EXAMINER